

## CLAIMS

1. A method of interference averaging in a multicarrier system,  
5 comprising:

- providing a plurality of subcarriers;
- transmitting nulls on selected ones of the subcarriers during  
a symbol period; and
- transmitting data on the remainder of the subcarriers during  
10 the symbol period.

15

2. The method of claim 1, further comprising:  
spacing the nulls evenly on the subcarriers across a channel  
band.

20

3. The method of claim 1, further comprising:  
randomly spacing the nulls on the subcarriers across a  
channel band.

25

4. The method of claim 1, further comprising:  
offsetting the subcarriers in time.

5. The method of claim 1, further comprising:  
offsetting the subcarriers in frequency.

6. A transmitter capable of interference averaging in a multicarrier system, comprising:

means for transmitting packet data on plurality of subcarriers;

5 means for transmitting nulls on selected ones of the subcarriers during a symbol period; and

means for transmitting data on the remainder of the subcarriers during the symbol period.

10 7. A method of interference averaging in a multicarrier system, comprising:

providing a plurality of subcarriers;

assigning a plurality of data symbols to a first subset of the subcarriers for transmission during a symbol period;

15 assigning the data symbols to a second subset of the subcarriers

for transmission during the symbol period; and

reducing the symbol transmit power as a function of at least one repeated data symbol in the symbol period.

20

8. The method of claim 7, further comprising:

assigning the at least one repeated data symbol to an adjacent subcarrier.

25 9. The method of claim 7, further comprising:

rotating the at least one repeated data symbol by a predetermined value.

30

10. The method of claim 7, further comprising:  
assigning the data symbols according to a predetermined  
cell repetition mapping.

5 11. The method of claim 7, further comprising:  
offsetting the subcarriers in time.

12. The method of claim 7, further comprising:  
offsetting the subcarriers in frequency.

10

13. A transmitter capable of interference averaging in a  
multicarrier system, comprising:  
means for assigning a plurality of data symbols to a first  
subset of the subcarriers for transmission during a symbol period;  
15 means for assigning the data symbols to a second subset of  
the subcarriers  
for transmission during the symbol period; and  
means for reducing the symbol transmit power as a function  
of at least one repeated data symbol in the symbol period.

20